

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-16 (cancelled)

Claim 17 (new): A method for inhibiting the growth of pathogenic strains in the gastrointestinal tract in a human in need thereof, comprising administering pediocin-producing pediococci to said human, wherein the pediococci are characterized by a survival rate as per the Survival Rate Test defined herein of at least 80 %.

Claim 18 (new): The method according to claim 17, wherein the survival rate is at least 90 %.

Claim 19 (new): The method according to claim 17, wherein the pediococci are isolated from human faeces.

Claim 20 (new): The method according to claim 17, wherein said administration prevents and/or treats infections by pathogenic bacteria in the gastrointestinal tract, diarrhoea, and/or secondary disorders associated herewith.

Claim 21 (new): The method according to claim 17, wherein the secondary disorders are selected from the group consisting of water disturbances, mineral balance disturbances, malnutrition, dysfunctioning of tissues, dysfunctioning of organs, dysfunctioning of organism, and combinations thereof.

Claim 22 (new): The method according to claim 17, wherein the pediococci comprise *Pediococcus acidilactici* strain LMG P-21927.

Claim 23 (new): The method according to claim 17, wherein the pathogenic bacteria are Gram-negative bacteria.

Claim 24 (new): The method according to claim 17, wherein the pathogenic bacteria are Gram-positive bacteria.

Claim 25 (new): The method according to claim 17, comprising administering pediocin-producing pediococci in combination with one or more further probiotics selected from the group consisting of *Lactobacillus rhamnosus*, *L. plantarum*, *L. fermentum*, *L. acidophilus*, *L. reuteri*, *L. casei*, *L. johnsonii*, *L. gasseri*, *L. crispatus*, *L. helveticus*, *L. salivarius*, *L. lactis*, *L. brevis*, *L. paracasei*, *L. sakei*, *Bifidobacterium animalis*, *B. lactis*, *B. adolescentis*, *B. longum*, *B. infantis*, *B. bifidum* and *B. breve*.

Claim 26 (new): A method for inhibiting the growth of pathogenic bacteria in the gastrointestinal tract in a human in need thereof, comprising administering pediocin-producing pediococci to said human, wherein the pediococci are isolated from human faeces.

Claim 27 (new) The method according to claim 26, wherein said administration prevents and/or treats infections by pathogenic bacteria in the gastrointestinal tract, diarrhoea, and/or secondary disorders associated herewith.

Claim 28 (new): The method according to claim 26, wherein the secondary disorders are selected from the group consisting of water disturbances, mineral balance disturbances, malnutrition, dysfunctioning of tissues, dysfunctioning of organs, dysfunctioning of organism, and combinations thereof.

Claim 29 (new): The method according to claim 26, wherein the pediococci comprise *Pediococcus acidilactici* strain LMG P-21927.

Claim 30 (new): The method according to claim 26, wherein the pathogenic bacteria are Gram-negative bacteria.

Claim 31 (new): The method according to claim 26, wherein the pathogenic bacteria are Gram-positive bacteria.

Claim 32 (new): The method according to claim 26, comprising administering pediocin-producing pediococci in combination with one or more further probiotics selected from the group consisting of *Lactobacillus rhamnosus*, *L. plantarum*, *L. fermentum*, *L. acidophilus*, *L. reuteri*, *L. casei*, *L. johnsonii*, *L. gasseri*, *L. crispatus*, *L. helveticus*, *L. salivarius*, *L. lactis*, *L. brevis*, *L. paracasei*, *L. sakei*, *Bifidobacterium animalis*, *B. lactis*, *B. adolescentis*, *B. longum*, *B. infantis*, *B. bifidum* and *B. breve*.

Claim 33 (new): An isolated pediocin-producing pediococcus characterised by a survival rate as per the Survival Rate Test defined herein of at least 90 %.

Claim 34 (new): The pediococcus according to claim 33, wherein the pediococcus is *Pediococcus acidilactici* as deposited at BCCM™/LMG under No. LMG P-21927.

Claim 35 (new): A health-promoting composition comprising a pediococcus according to claim 33, as a probiotic component.

Claim 36 (new): The health-promoting composition according to claim 35, further comprising a component selected from the group consisting of pediocin, additional probiotics, prebiotics, immunoglobulins, and mixtures thereof.

Claim 37 (new): A method for isolating pediocin-producing pediococci from a substrate, wherein the pediocin-producing pediococci is isolated by using a medium comprising xylose, an antibiotic derived from quinolones and pediocin.

Claim 38 (new): The method according to claim 37, wherein the substrate is human faeces.